

**Notice of Allowability**

Application No.

10/659,397

Examiner

Susan W Berman

Applicant(s)

HIROKANE ET AL.

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to filing.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 6/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

*IL*

### REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance:

The prior art cited herein and otherwise known to the examiner does not teach a process for producing a polyester resin comprising a dicarboxylic acid and a diol having a cyclic acetal structure wherein the process follows the molar ratio and formula (I) requirements set forth in the instant claims.

Gipp et al (3,963,800) disclose a polyester having soft segments containing ether groups and a process for production therefor. See column 4, lines 3-37. Gipp et al do not teach the molar ratios or formula (I) requirements of the process set forth in the instant claims.

The closest prior art cited below has at least one common inventor with the instantly claimed invention.

Hirokane et al (6,653,440) disclose and claim a process for producing a polyester by reacting a dicarboxylic acid or ester thereof with a subliminal diol in the presence of excess non-subliminal diol. The subliminal diol can be a cyclic acetal diol among other kinds of diols (see claim 2). The specific process steps set forth in US '440 do not correspond to the process steps set forth in the instant claims. There is no motivation provided in US '440 to select only cyclic acetal diols from the 'subliminal diols' specifically taught by US '440 and to change the process steps to those set forth in the instant claims to produce a polyester resin.

EP 1 164 155 discloses a process for producing a polyester by polymerizing a monomer mixture comprising 55-60 mol % of a spiroglycol (cyclic acetal) and 330 to 95 mol % of ethylene glycol and a dicarboxylic acid containing 80 to 100 mol% terephthalic acid and/or ester. EP '155 teaches that transesterification or direct esterification can be used. EP '155 does not teach the molar ratios or formula (I) requirements of the process set forth in the instant claims.

EP 1 262 524 discloses a polyester resin "B" obtained by polycondensation of a dicarboxylic acid containing a cyclic acetal structure and/or a diol containing a cyclic acetal structure. EP '524 teaches

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that transesterification or direct esterification can be used. EP '155 does not teach the molar ratios or formula (I) requirements of the process set forth in the instant claims.

Oguro et al (6,740,376) is equivalent in disclosure to EP 1 262 524.

US Publication 2003/0100702 (Hirokane et al) is equivalent in disclosure to EP 1 164 155.

US Publication 2003/0195303 (Ikeda et al) claims a polyester resin compositions comprising two different polyester, one having a cyclic acetal structure and the other having no cyclic acetal structure. does not claim a process for preparation or the molar ratios or formula (I) requirements of the process set forth in the instant claims.

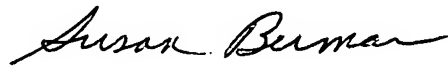
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan W Berman whose telephone number is 571 272 1067. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272 1078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Susan W Berman  
Primary Examiner  
Art Unit 1711

sb  
March 21, 2005